edexcel

Mark Scheme (Results)

Summer 2016

Pearson Edexcel GCE in Music Technology (6MT02)

Paper 1: Listening and Analysing

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General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

Section A

Question Number	Question	Mark
1(a)	This track was recorded in the 1980's. Identify **three** production features that support this statement.	3
	Acceptable Answers	
	Any **three** of: • Splashy / bright / loud / punchy snare • Clicky / prominent kick • Gated reverb on snare • High reverb level • Synthesisers (allow synths) • Heavily processed drums (allow electronic drums / drum machine) • Synths and drums feel sequenced • Bright, clean guitar sound • Light chorus on guitar • Reversed sound / sample • Heavily compressed guitar / bass guitar If more than one answer is given per line, accept first answer only	

Question Number	Question	Mark
1(b)	What function on a synthesiser is used on the synth solo during the intro?	1
	Acceptable Answers	
	• Portamento / glide / pitch bend If more than one answer is given, accept first answer only	

Question Number	Question	Mark
1(c)	Listen to the vocal line in the first verse (1'15" – 1'29") up to and including the word 'apologise'. Which of the following statements is true? Put a cross in the correct box.	1
	Acceptable Answers	
	• D. an octave	

Question Number	Question	Mark
1(d)	The snare drum in the verse has been spread across the stereo field. How might this have been achieved?	2
	Acceptable Answers	
	• Double-tracked (1) and tracks panned L & R (1) • Short delay (1) and signals panned L & R (1) Accept any valid alternative explanation	

Question Number	Question	Mark
1(e)	Name **two** performance techniques used by the bassist between 1'28" and 1'47".	2
	Acceptable Answers	
	Any **two** of: • Slapping • Popping • Plucking • Slides / glissando • Hammer on / pull offs If more than one answer is given per line, accept first answer only	

Question Number	Question	Mark
1(f)	Which of the following is the correct rhythm for the vocal line between 1'54" and 1'57"?	1
	Acceptable Answers	
	• C. 	

Question Number	Question	Mark
2(a)	In which year was this track recorded? Put a cross in the correct box.	1
	Acceptable Answers	
	• B. 1967	

Question Number	Question	Mark
2(b)	Describe the panning of the following instruments in the first part of the verse (0'24''-0'37'').	2
	Acceptable Answers	
	• Acoustic guitar – (Hard) right / R • Bass guitar – (Hard) left / L If more than one answer is given, accept first answer only	

Question Number	Question	Mark
2(c)	When recording on four- or eight-track tape, engineers often used a technique known as ‘bouncing down’. Describe this process and its purpose.	3
	Acceptable Answers	
	• Mixing several tracks together • Onto a new single track • Recording new parts onto the spare tracks • To free up extra space • In order to record more instruments than there are tracks available Credit reference to the permanence of the process	

Question Number	Question	Mark
2(d)	Describe the rhythm of the vocal line “And I will be alone again tonight, my dear” (0’44” – 0’49”).	1
	Acceptable Answers	
	• Syncopated (accept off-beat) / cross-phrased / same rhythm as instrumental tracks	

Question Number	Question	Mark
2(e)	Describe the reverb on the acoustic guitar between 0’49” and 1’08”.	2
	Acceptable Answers	
	• High reverb level / wet • Long reverb (time) / long pre-delay (time) • Panned opposite dry signal • Loud / prominent first reflection • Sounds like delay • Reverb type: plate / spring / room / hall / echo chamber	

Question Number	Question	Mark
2(f)	Name the bowing technique used in the violin part between 2’36” and 2’56”.	1
	Acceptable Answers	
	• Tremolando / Tremolo (accept Trem) Accept only these spellings	

Question Number	Question	Mark
3(a)	What is the tempo of this song in beats per minute?	1
	Acceptable Answers	
	• 120 (bpm) / allow any value between 110 -130 (bpm) If a range is given, the mid-point should be taken	

Question Number	Question	Mark
3(b)	There are multiple guitar tracks in this recording. Identify **two** ways in which they have been kept distinct in the mix.	2
	Acceptable Answers	
	Any **two** of: • Different placement in stereo field • Use of different EQ settings • Use of different FX • Use of different distortion settings	

Question Number	Question	Mark
3(c)	What is the musical term for the change in dynamic of the piano part heard between 1'19" and 1'22"?	1
	Acceptable Answers	
	• Crescendo (accept Cresc) Accept only these spellings	

Question Number	Question	Mark
3(d)	Apart from a regular drum kit, other percussion instruments are used in this track. Name **two** of them.	2
	Acceptable Answers	
	• Woodblock / Temple block • Cowbell • Shaker / egg / maraca • Flexatone • Piano If more than one answer is given per line, accept first answer only	

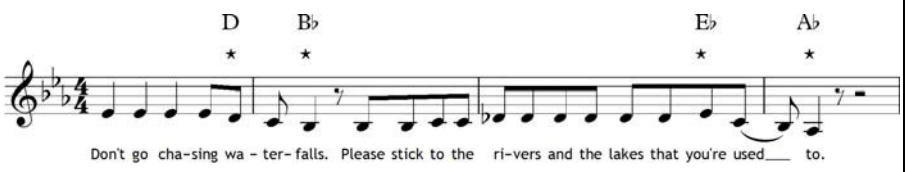
Question Number	Question	Mark
3(e)	Compare the texture of the intro (0'06" – 0'47") with that of the first verse (0'47" – 1'18").	4
	Acceptable Answers	

Intro	Verse
Modulation FX	
Sustained sounds	Marcato / rests
Polyphonic / overlapping layers	Homophonic mainly
Parts fade in and out	
More layered	Sparser texture
	Vocals added
Vocal / synth pad	
Light percussion	Full drum kit / used for rhythmic driving
	Lower register used
Much delay and reverb	
Clean guitar	Distorted guitar
Woodwind ornamentation	
	Homo-rhythmic
Texture builds gradually	

- Woodblock used in both
- High hat is the same in both

Question Number	Question	Mark
4(a)	A wah-wah pedal has been used on the guitar. What aspect of the sound does wah-wah affect?	1
	Acceptable Answers	
	• Frequency content / filtering / EQ / cut-off	

Question Number	Question	Mark
4(b)	Tremolo has been applied to the electric piano. What aspect of the sound does tremolo affect?	1
	Acceptable Answers	
	• Amplitude / volume	

Question Number	Question	Mark
4(c)	Fill in the **four** missing pitches from the lead vocal line between 1'24" and 1'33".	4
	Acceptable Answers	
		

Question Number	Question	Mark
4(d)(i)	Complete the following sentences about choice of mics for recording a trumpet.	2
	Acceptable Answers	
	1. A dynamic mic would cope well with the high (**sound pressure**) **levels** / **SPL** / **volume** / **amplitude**. 2. If using a condenser, you would use the **pad** / **-5dB** / **10dB** / **-20dB** / **HPF** / **rumble filter** / **polar response** / **phantom** (**power**) switch.	

Question Number	Question	Mark
4(d)(ii)	Describe the **positioning** of a microphone to effectively close mic a trumpet.	2
	Acceptable Answers	
	• 2 inches - 4 feet away (5-120cm) / clip mic • Facing bell • Off axis / angled	

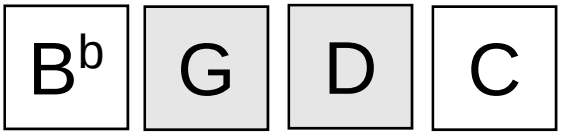
Section B

Question Number	Question	Mark
5(a)	The time signature changes at 0'48". Which of the following best describes the new time signature? Put a cross in the correct box.	1
	Acceptable Answers	
	• D. 7/8	

Question Number	Question	Mark
5(b)(i)	Stylistically, this track sits between punk and new wave. Identify **two** similarities in this track to punk, and **two** similarities to new wave. Similarities to punk	2
	Acceptable Answers	
	Any **two** of: • Distorted guitar • Simple harmonic structure • Aggressive, shouted vocals / spoken phrases • Repetitive melody (simple) • Loose performances • Simple production values • Vocal 'yelps' If more than one answer is given per line, accept first answer only	

Question Number	Question	Mark
5(b)(ii)	Similarities to new wave	2
	Acceptable Answers	
	Any **two** of: • Use of piano / electric piano / saxophone • Changing time signature • Extended guitar solo • Atonal phrases • Lyrical content more sophisticated • Chorus / double-tracked vocals / reverb on the vocals and sax • More extensive use of tech If more than one answer is given per line, accept first answer only	

Question Number	Question	Mark
5(c)	Identify the modulation effect used on the electric piano.	1
	Acceptable Answers	
	• Chorus / Detune If more than one answer is given, accept first answer only	

Question Number	Question	Mark
5(d)	Identify the root notes of the repeated chord sequence in the verse (beginning at 0'20").	2
	Acceptable Answers	
	 • Allow lower case • Accept Gm / G min / G maj / G major in second box • Accept Dm / D min / D maj / D major in third box • Do not accept G# or G♭ in second box • Do not accept D# or D♭ in third box	

Question Number	Question	Mark
5(e)(i)	The vocal has been double-tracked between 1'34" and 1'43". What is meant by the term 'double tracking'?	2
	Acceptable Answers	
	• Recording two performances (1) of the same material (1) by the same person (1) • On two separate tracks • Played back simultaneously Description of ADT max one mark	

Question Number	Question	Mark
5(e)(ii)	ADT has not been used to create this effect. What evidence is there to support this statement?	1
	Acceptable Answers	
	• The performances are not identical • There are pitch / rhythmic differences • Chorusing	

Question Number	Question	Mark
5(f)	The wide dynamic range of the vocal has been controlled with compression. Briefly describe the following three parameters of a compressor.	3
	Acceptable Answers	

Threshold	• Sets the amplitude at which the compressor is triggered • Usually set in decibels / dB **(1)**
Ratio	• Sets the amount of gain reduction / compression • Ratio between input and output volume **(1)**
Attack	• The speed with which compression acts **(1)**

Question Number	Question	Mark
5(g)	Suggest **two** ways the distortion on the electric guitar could have been achieved on this recording.	2
	Acceptable Answers	
	• Pedal • Overdriving (the valves) • Turning up the gain / drive / volume (on the amp) • Lead / distortion / high gain channel on the amp	

Question Number	Question	Mark
5(h)	Select **one** of the artists below, and describe their contribution to punk and new wave music. Support your answer with reference to relevant albums and/or tracks.	4
	Acceptable Answers	
	Allow max one mark for naming specific tracks or albums. Additional marks for naming tracks / albums only if qualified. Max three marks if no relevant albums or tracks mentioned. Credit answers that relate to contribution to punk and new wave, not general facts unrelated to their musical output. Ramones • One of the first punk bands • Influenced UK punk scene • Lack of solos • Short songs • Short albums • Fast tempos • Simple harmonies • Brought a new raw, unpolished sound to rock music • A pared down rock'n'roll style • Lyrics confrontational / rebellious / socio-political / drug-related The Jam • Incorporated elements of 1960's rock / mod music • Incorporated elements of R'n'B • Pop sensibility • Politically aware / rebellious / controversial lyrics • More polished performances / production than their punk contemporaries • Incorporated keyboards in later recordings • Catchy hooks • Smoother vocal delivery • Gradually left their punk roots to evolve into a new wave style Accept any other valid contribution(s)	

Question Number	Question	Mark
6(a)	Describe the filtering of the laser sound in the intro.	2
	Acceptable Answers	
	• Filters out high frequencies / high cut filter / LPF • Decreasing cut-off / decreasing frequency • High resonance / high Q / high peak / resonant • Filter envelope / short attack	

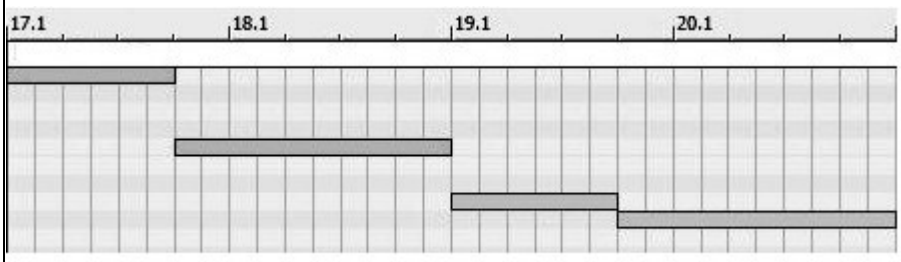
Question Number	Question	Mark
6(b)	Listen to the words 'blow, blow, blow' at 1'06". What is the interval between the lead vocal and the lower vocal?	1
	Acceptable Answers	
	• Octave Accept any valid description	

Question Number	Question	Mark
6(c)	Which of the following best describes the melody of the first three notes in the chorus (1'28" – 1'33")? Put a cross in the correct box.	1
	Acceptable Answers	
	• A. Chromatic	

Question Number	Question	Mark
6(d)	The singer uses a breathy quality in the chorus (1'28" – 1'54"). Describe how this has been emphasised using technology.	3
	Acceptable Answers	
	• Volume automation / volume raised (on breath) • HF boost / HPF / low cut / description of finding and boosting breathy frequencies • Enhancer / exciter • (Breath) Samples added • Compression (1) with low threshold (1) • Reverb / delay if correctly qualified	

Question Number	Question	Mark
6(e)	Describe how the instrumentation changes between the last line of the verse (1’21”-1’28”) and the start of the chorus (1’28”-1’35”).	4
	Acceptable Answers	
	• Thin drum texture in verse / Full drum texture in chorus • Synths added in chorus • Arpeggiated (synth) added in chorus • (Synth) Pad(s) added in chorus • Vox is doubled in chorus • Thin bass timbre in verse / Full bass timbre in chorus • Bass drops out at end of verse and re-enters in chorus • ‘Swoosh’ filter sweep in verse only • Ascending pitch staccato synth in verse only	

Question Number	Question	Mark
6(f)	Identify the effect that makes the lead vocal sound robotic between 2'58'' and 3'07''.	1
	Acceptable Answers	
	• Vocal transformer • Robotize • Melodyne • Autotune • Pitch correction • Flex pitch • VariAudio Allow Vocoder or Talk box If more than one answer is given, accept first answer only	

Question Number	Question	Mark
6(g)	Which of the following best represents the bass line between 0’33” and 0’40”? Put a cross in the correct box.	1
	Acceptable Answers	
	• A.  	

Question Number	Question	Mark
6(h)	Describe the delay on the word ‘air’ from 4’13”.	2
	Acceptable Answers	
	• Timed delay / set to half a bar (minim). Allow between 800-900ms • Multiple repeats / high feedback • Repeats become quieter • Repeats remain central in stereo field • Some change in EQ / HPF	

Question Number	Question	Mark
6(i)	Describe the main features of **one** of the following dance music styles.	5
	Acceptable Answers	
	Acid House • C.120 bpm (+/- 10) • Four-on-the-floor beat • Elements of disco / house • Generally minimal productions • Features TB-303 • Use of TR-808 / TR-909 • Extreme filtering • Filter sweeps • (High) Resonance (filtering) • Squelchy / filtered bass / sawtooth • Dynamic climaxes • Use of loops • Vocal samples / <u>extensive</u> use of non-vocal samples • Reversed samples • Generally instrumental • Generally long tracks • Static harmony • Riff based Grime • c.140 bpm (+/-10) • Use of retro synth sounds / sawtooth • Orch hits / strings • Elements of hip-hop • Rapping • Elements of funk / soul • Influenced by drum‘n’bass / jungle • Synth bass lines • Distorted basslines • Generally quite a dry production / under-produced • Pitch-shifted voices • Disjointed / fragmented / complex beats • Vocals lack melodic interest • Static harmony • Very repetitive / riff based • Lyrics (and delivery) are misogynistic / aggressive / negative / gang related • UK-based	

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